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## NOTICE OF ALLOWANCE AND FEE(S) DUE

24498

7590

10/30/2008

Joseph J. Laks Thomson Licensing LLC 2 Independence Way, Patent Operations PO Box 5312 PRINCETON, NJ 08543 EXAMINER

PORTKA, GARY J

ART UNIT PAPER NUMBER

2188

DATE MAILED: 10/30/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,084	09/27/2005	Robert Allen Castlebary	PU030099	4381

TITLE OF INVENTION: ASYNCHRONOUS JITTER REDUCTION TECHNIQUE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	01/30/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

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If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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-		lock 1 for any change of address)	Fe pa	e(s) Transmittal. This pers. Each additional	certificate cannot be used	or domestic mailings of the for any other accompanying ent or formal drawing, must
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		tions	Sta	ereby certify that this	Fee(s) Transmittal is bein	g deposited with the United st class mail in an envelope above, or being facsimile late indicated below.
PO Box 5312 PRINCETON, NJ 08543						(Depositor's name)
TRINCETON, I	NJ 00545					(Signature)
						(Date)
APPLICATION NO.	FILING DATE	;	FIRST NAMED INVENTO	R	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,084	09/27/2005		Robert Allen Castlebary	y	PU030099	4381
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APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE			
nonprovisional	NO	\$1510	\$300	\$0 <b>¬</b>	\$1810	01/30/2009
	MINER	ART UNIT	CLASS-SUBCLASS			
	A, GARY J	2188	711-167000			
<ol> <li>Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</li> <li>Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</li> <li>"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer</li> </ol>			2. For printing on the patent front page, list  (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is 3			
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PLEASE NOTE: Un	lless an assignee is ident th in 37 CFR 3.11. Com	A TO BE PRINTED ON tified below, no assignee pletion of this form is NO	data will appear on the	patent. If an assignee n assignment.		document has been filed for
Please check the appropri	riate assignee category o	r categories (will not be pr	rinted on the patent):	Individual Cor	poration or other private gr	oup entity 🚨 Government
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OMB 0651-0033

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Joseph J. Laks		PORTKA, GARY J		
Thomson Licensin		ART UNIT	PAPER NUMBER	
2 Independence W PO Box 5312 PRINCETON, NJ	yay, Patent Operations 08543		2188 DATE MAILED: 10/30/200	8

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 306 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 306 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)		
	10/551,084	CASTLEBARY, ROE	BERT ALLEN	
Notice of Allowability	Examiner	Art Unit		
	Gary J. Portka	2188		
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in to or other appropriate commun GHTS. This application is sure and MPEP 1308.	his application. If not include ication will be mailed in due	ed course. <b>THIS</b>	
2. The allowed claim(s) is/are 1, 3-7, and 9-12, renumbered a	as 1-10 respectively.			
3. ☐ Acknowledgment is made of a claim for foreign priority una) ☐ All b) ☐ Some* c) ☐ None of the:  1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4. ☐ A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give	been received.  been received in Application cuments have been received of this communication to file a lENT of this application.	No in this national stage applicat a reply complying with the rec	quirements	
<ul> <li>5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.</li> <li>(a) including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached</li> <li>1) hereto or 2) to Paper No./Mail Date</li> <li>(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date</li> <li>Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).</li> <li>6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ul>				
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6.	ormal Patent Application mmary (PTO-413), lail Date mendment/Comment tatement of Reasons for Allo	wance	

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert B. Levy on October 27, 2008.

The application has been amended as follows:

### In the claims:

1. (Currently amended) A method for reading data from a memory to achieve reduced jitter, comprising the steps of:

applying successive read clock pulses to the memory at a frequency of  $xf_n$  where x is a whole integer and  $f_n$  is the frequency at which the memory is clocked to write data;

applying successive Read Addresses to the memory at a rate slower than the  $xf_n$  frequency of said applying successive read clock pulses to identify successive locations in the memory for reading when the memory is clocked with read clocked pulses to enable reading of samples stored at such successive locations; and

altering the duration of at least one successive Read Addresses in response to memory usage status to maintain memory capacity below a prescribed threshold, by

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lengthening the duration of the at least one Read Address to repeat reading of a fractional sample.

2. (Canceled)

3. (Currently amended) The method according to claim 2 1 further comprising the step of lengthening the duration of more than one Read Address to repeat the reading

of more than one fractional sample.

4. (Currently amended) The method according to claim 1 further comprising the

step of A method for reading data from a memory to achieve reduced jitter, comprising

the steps of:

applying successive read clock pulses to the memory at a frequency of  $xf_n$  where x is a whole integer and  $f_n$  is the frequency at which the memory is clocked to write data;

applying successive Read Addresses to the memory at a rate slower than the  $xf_n$  frequency of said applying successive read clock pulses to identify successive locations in the memory for reading when the memory is clocked with read clocked pulses to enable reading of samples stored at such successive locations; and

altering the duration of at least one successive Read Addresses in response to memory usage status to maintain memory capacity below a prescribed threshold by shortening the duration of the at least one Read Address to skip reading of a fractional sample.

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5. (Original) The method according to claim 4, further comprising the step of shortening the duration of more than one Read Address to skip reading of more than one fractional sample.

- 6. (Original) The method according to claim 1 further comprising the step of applying the successive read clock pulses to the memory at a frequency four times the frequency  $f_n$ .
- 7. (Currently amended) A system An apparatus for reading stored data to achieve reduced jitter, comprising:

a memory into which data is written and from which data is read;

a clock applying successive read clock pulses to the memory at a frequency of  $xf_n$  where x is a whole integer and  $f_n$  is the frequency at which the memory is clocked to write data;

a memory address generator for applying successive Read Addresses to the memory at a rate slower than the  $xf_n$  frequency of said clock applying successive read clock pulses to identify successive locations in the memory for reading when the memory is clocked with read clocked pulses to enable reading of samples stored at such successive locations; and for altering the duration of at least one successive Read Addresses in response to memory usage status to maintain memory capacity below a prescribed threshold, wherein the memory address generator lengthens the duration of the at least one Read Address to repeat reading of a fractional sample.

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8. (Canceled)

9. (Currently amended) The apparatus according to claim & <u>7</u> wherein the memory address generator lengthens the duration of more than one Read Address to repeat the reading of more than one fractional sample.

10. (Currently amended) An apparatus for reading stored data to achieve reduced jitter, comprising:

a memory into which data is written and from which data is read;

a clock applying successive read clock pulses to the memory at a frequency of  $xf_n$  where x is a whole integer and  $f_n$  is the frequency at which the memory is clocked to write data;

a memory address generator for applying successive Read Addresses to the memory at a rate slower than the  $xf_n$  frequency of said clock applying successive read clock pulses to identify successive locations in the memory for reading when the memory is clocked with read clocked pulses to enable reading of samples stored at such successive locations; and for altering the duration of at least one successive Read Addresses in response to memory usage status to maintain memory capacity below a prescribed threshold, wherein the memory address generator shortens the duration of the at least one Read Address to skip reading of a fractional sample.

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11. (Original) The apparatus according to claim 10 wherein the memory address generator shortens the duration of more than one Read Address to skip reading of more than one fractional sample.

12. (Original) The apparatus according to claim  $4 \frac{7}{2}$  wherein the system clock applies successive read clock pulses to the memory at a frequency four times the frequency  $f_n$ .

### Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary J. Portka whose telephone number is (571) 272-4211. The examiner can normally be reached on M-F 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gary J Portka/
Primary Examiner, Art Unit 2188
October 27, 2008